

REMARKS

Rejections - 35 USC 102

Claim 95 stands rejected under 35 USC 102 as anticipated by either Andrus et al., Langhals et al., or Yamamoto et al. Claim 95 has been canceled, rendering moot this rejection.

New independent claim 108 includes a limitation directed to ink-jet printing a luminescent material, as well as limitations that limit the method to the fabrication of organic light emitting devices having electrodes. It is believed that this combination is patentable over the art previously cited.

Yamamoto '558

Yamamoto '558 is directed to inks that are specifically formulated for printing on textiles. See Yamamoto title, abstract, and col. 1 lines 11-12. The "dyes" of Yamamoto provide color by selectively absorbing light, as opposed to the dyes used in an OLED, which luminesce -- i.e., an exciton in an excited state relaxes, resulting in the emission of a photon. The two mechanisms are entirely different, and one of skill in the art would not expect a method of printing ink on fabric to have relevance to printing ink in an OLED. For example, the concentration of dye in an OLED is important, because too much dye will lead to non-luminescent quenching, and too little dye will not provide enough sites for an exciton to emit light by the desired mechanism. By way of contrast, dyes used on fabrics do not emit light via exciton relaxation. As a result, those using dyes in an OLED must contend with a range of issues that have no relevance to dyeing fabric, so those of skill in the art would not expect that a method that works with fabric to be applicable to OLEDs.

Moreover, the specific invention of Yamamoto appears to be directed to formulations including a mono-chlorotriazine and / or a vinyl sulfone group. col. 3, lines 51-63. The use of such groups in an OLED would significantly reduce OLED lifetime, which is an important parameter. The disclosure of Yamamoto therefore teaches away from use in an OLED.

Yamamoto mentions "fluorescent brighteners" at col. 6, lines 41-42. These substances have a broad emission spectra, and are not suitable for use as monochromatic light emitters. One of skill in the art would therefore not use such a substance in a method for making OLEDs

having "luminescent light emitting materials ... patterned into regions that emit different colors of light" as required by claim 108. Moreover, the brighteners are apparently disclosed as a minor additive for the purpose of "brightening" a color that is already established by an absorptive dye that is present in a much greater concentration than the brightener. The brighteners are not primarily responsible for determining the color seen by a viewer, and are therefore not analogous to the luminescent light emitting materials of the present claims.

Langhals '700 and Andrus '147

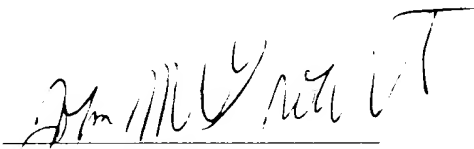
Similarly, Langhals '700 and Andrus '147 are directed to specific compositions of ink that have specific properties that make them well-suited for use for marking purposes. See Langhals '700 at col. 11, lines 54-60; Andrus at col. 2, line 62 - col. 3, line 25. These references are not directed to OLEDs, and do not, for example, disclose the fabrication of electrodes as required by claim 108. The applicants respectfully assert that the present claims are patentably distinct over Langhals and Andrus.

CONCLUSION

The Applicants respectfully request the reconsideration and withdrawal of all pending rejections and objections, and allowance of the claims.

Respectfully submitted,
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